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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte REIKO MIYAZAKI

Appeal 2016-003061
Application 12/755,946[1]
Technology Center 2600

Before ALLEN R. MacDONALD, DANIEL J. GALLIGAN, and SHARON FENICK, *Administrative Patent Judges*.

FENICK, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–5, 7, 8, 12–19, 21, 22, 26, and 29–31. (Reply Br. 2.) Claims 9–11 and 23–25 have been indicated as allowable. (Answer 36.) Claim 6, 20, 27, and 28 are cancelled. (Appeal Br. 26, 31, 33–34.)

We affirm and designate our affirmance as a NEW GROUND OF REJECTION pursuant to our authority under 37 C.F.R. § 41.50(b).

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[1] Appellant identifies Sony Corporation as the real party in interest. (Appeal Br. 3.)

Invention

Appellant's invention relates to the detection of an area of contact on the touch panel surface of an information processing apparatus by an object external to the device. A calculation is performed to determine (a) the angle of contact of the object and (b) whether substantial movement has occurred at the point of contact, and if the angle changes but no substantial movement has occurred, the device determines that a change in angle of inclination has occurred. (Spec. Abstract, 7, 22–23.)

Illustrative Claim

Claim 1, reproduced below with key limitations emphasized, is illustrative:

> 1. Apparatus for detecting an inclination of a device, the apparatus comprising:
>
> a detector for determining a contact location on a surface of the device at which an object external to the device currently contacts the device;
>
> a memory storing instructions for determining a change in orientation of the object relative to the surface of the device, determining a movement of the contact location upon the surface of the device, and determining a change in inclination of the device based on the determined change in orientation of the object and the determined movement of the contact location; and
>
> one or more processors for executing the instructions,
>
> wherein the instructions include instructions for executing an operation of the device when the determined change in inclination of the device meets a predetermined criteria,
>
> *wherein when the orientation of the object is determined to have changed and only when substantially no movement of the contact location is determined to have occurred during the change of orientation of the object*, the change in inclination of the device is determined to meet the predetermined criteria and

the one or more processors are controlled to execute the instructions for executing the operation of the device, and

wherein the one or more processors are controlled so as not to execute the instructions for executing the operation of the device when the contact location is determined to have substantially moved during the change of orientation of the object.

Rejections

The Examiner rejects claims 1–3, 7, 8, 12, 13, 15–17, 21, 22, 26, and 29–31[2] under 35 U.S.C. § 103(a) as unpatentable over Bilow (US 2007/0300182 A1; pub. Dec. 27, 2007), Nagata et al. (US 8,319,832 B2; iss. Nov. 27, 2012) (hereinafter "Nagata"), and Nurmi (US 2009/0167702 A1; pub. July 2, 2009). (Final Action 5–30; Answer 3–25.)

The Examiner rejects claims 4, 5, 18, and 19[3] under 35 U.S.C. § 103(a) as unpatentable over Bilow, Nagata, Nurmi, and Keam (US 2009/0085881 A1; pub. Apr. 2, 2009). (Final Action 30–40; Answer 25–34.)

The Examiner rejects claim 14 under 35 U.S.C. § 103(a) as unpatentable over Bilow, Nagata, Nurmi, and Tsuzaki et al. (US 2009/0122007 A1; pub. May 14, 2009) (hereinafter "Tsuzaki"). (Final Action 30–40; Answer 25–34.)

Issue

Did the Examiner err in finding that the combination of Bilow, Nagata, and Nurmi teaches or suggests an apparatus which executes

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[2] Claims 9, 10, 23, and 24 were included in the Final Action rejection but subsequently indicated as allowable. (Answer 36.)
[3] Claims 11 and 25 were included in the Final Action rejection but subsequently indicated as allowable. (Answer 36.)

instructions when the orientation of an object in contact with the device is determined to have changed and substantially no movement of the contact location is determined to have occurred during the change of orientation of the object, and wherein processors are controlled so as not to execute the instructions when the contact location is determined to have substantially moved during the change of orientation of the object?

ANALYSIS

The Examiner finds in the Final Action that Nagata and Nurmi, in combination with Bilow, teach or suggest the last two limitations of claim 1, in which, when a change of orientation of an object in contact with a device occurs, instructions are executed if substantially no movement of the contact location is determined to have occurred, but where the instructions are not executed if the contact location is determined to have substantially moved. (Final Action 8–10.) In the Answer the Examiner finds that Nagata, in combination with Bilow, teaches these limitations. (Answer 6–7.)

Appellant argues that the cited portions of Nagata do not teach the claim limitations as found by the Examiner, as the portions of Nagata cited by the Examiner do not show a change in orientation of a finger, but rather show three separate examples of different approach angles of a finger to a device. (Appeal Br. 15, citing Nagata, col. 9, ll. 41–63, Figs. 13A–13C; Reply Br. 5–6.) Appellant argues that the cited portions of Nurmi teach only moving a stylus to contact a device, and activating a functionality based on the angle at which the stylus enters the screen area, and thus do not teach or suggest detecting a change in orientation in the stylus. (Appeal Br. 17–18, citing Nurmi ¶ 68.) We agree with Appellant that the cited portions of Nagata and Nurmi do not teach or suggest the limitations.

However, Nurmi discloses an interaction method in which "[d]ifferent functions can be activated based on the stylus angle (angle between stylus and screen)" (Nurmi ¶ 49) and that "[d]etecting a change in the angle of the pointing device . . . can be used to select an operation and/or perform an operation" (*id.* ¶ 50.) Nurmi specifically discloses:

> Real time changing of the stylus angle (as opposed to merely a static sensing at one instance) can also be sensed and used. There are lots of possible actions and functions that can be done or activated by sensing the changing of the stylus angle. **For example, a user can place the stylus to a certain part of a screen and then change the angle of stylus while keeping the point of the stylus at the same place on the screen.** This can, for example, be used to change music volume for instance. A user can put the stylus on top of volume icon and change the stylus angle towards the right to increase volume or change the stylus angle towards the left to decrease volume. As another example, this same type of stylus movement could be used to change color or shade or sharpness in a picture. Change of stylus angle can also be used for scrolling content, drawing different items to the screen, to input text by changing the angle to select different characters (perhaps similar to a joystick movement).

(*Id.* ¶ 58, emphasis added.) Nurmi specifically contrasts this change in stylus angle during a time in which the contact point remains at the same place with "[a]nother type of movement" in which both the angle of the stylus and the location of the contact point change at the same time, and teaches that this could be sensed and used to trigger alternate functionality. (*Id.* ¶ 59.) These portions of Nurmi, not cited by the Examiner, in combination with the cited portions of Bilow, Nagata, and Nurmi, teach or suggest the disputed limitations.

Thus, with respect to claim 1, having considered the Examiner's rejections in light of the Appellant's arguments and the evidence of record,

we conclude that claim 1 is unpatentable over Bilow, Nagata, and Nurmi. Because we base our conclusion in part on a portion of Nurmi which was not cited by the Examiner, we designate our affirmance of the Examiner's rejection as a new ground of rejection to ensure that Appellant have a fair opportunity to respond.

With regard to claims 2–5, 7, 8, 12–19, 21, 22, 26, and 29–31, Appellant either does not separately contest the Examiner's rejections or presents an argument based solely on the argument with respect to claim 1 (Appeal Br. 20-23), and therefore we find these claims unpatentable on the same grounds as claim 1.

DECISION

We affirm the Examiner's decision rejecting claims 1–5, 7, 8, 12–19, 21, 22, 26, and 29–31 under 35 U.S.C. § 103(a) as unpatentable.

Because the fact finding and reasoning relied on by the Board to sustain the rejections of the claims differs from the facts and reasoning relied on by the Examiner, we designate our affirmance of the modified rejection of these claims as a NEW GROUND OF REJECTION so as to provide Appellant with a full and fair opportunity to respond to the thrust of the rejections.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). 37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that Appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of

the following two options with respect to the new grounds of rejection to avoid termination of the appeal as to the rejected claims:

> (1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new Evidence relating to the claims so rejected, or both, and have the matter reconsidered by the Examiner, in which event the proceeding will be remanded to the examiner. . . .
>
> (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same Record.

Pursuant to 37 C.F.R. § 1.136(a)(1)(iv), no time period for taking any subsequent action in connection with this appeal may be extended.

AFFIRMED
37 C.F.R. 41.50(b)